

THERMAL AND MECHANICAL WORKSHOP




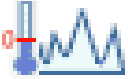
THERMAL CDR

Marco Molina


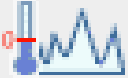
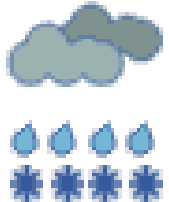
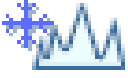
Joseph Burger

martedì 9 marzo 2004


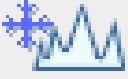
Benvenuti!

☾ AM 00-12	Cielo generalmente sereno o poco nuvoloso. Temp. 0 °C a 1000 metri. Vento al suolo 1 m/sec.		1000 m 
☾ PM 12-00	Cielo generalmente sereno o poco nuvoloso. Temp. 0 °C a 950 metri. Vento al suolo 4 m/sec.		950 m 

mercoledì 10 marzo 2004

☾ AM 00-12	Cielo generalmente nuvoloso o irregolarmente nuvoloso. Temp. 0 °C a 850 metri. Vento al suolo 4 m/sec.		850 m 
☾ PM 12-00	Cielo prevalentemente molto nuvoloso o coperto. Nevicate in pianura. Nevicate in pianura. Vento al suolo 7 m/sec.		300 m 

giovedì 11 marzo 2004

☾ AM 00-12	Cielo poco nuvoloso o parzialmente nuvoloso. Nevicate in pianura. Nevicate in pianura. Vento al suolo 3 m/sec.		300 m 
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WHY DO WE HAVE A THERMAL CDR?

- More than 50% of the documentation available on time
- Structural analysis still running after mass saving (Aug '03 - Jan'04)
- A stable configuration is needed to complete the detailed design

WHY DO WE HAVE A THERMAL CDR?

- Manufacturing activities must start (STA)
- An official milestone is needed due to the large amount of work completed
- A Delta Thermal CDR will be needed anyway

A FEW PRACTICAL THINGS

- A PC connected to the web is available in meeting room “CASTORE”
- Coffee, water, drinks, cookies are (should be) available outside for the duration of the meeting
- For various information, you can ask Serena

DOCUMENTATION

- An hardcopy of the documentation is available
- Meeting rooms for splinter meetings are available

ORIGINATOR RID ID: CGS	Review Item Discrepancy (RID)		PRIME RID ID: AMS02-RD-CGS-001
PROJECT AMS02--THERMAL	DOCUMENT IDENTIFICATION:		SYSTEM/SUBSYSTEM:
DOC. TITLE:			VOL./SECT./PARA./PAGE/REF.
TITLE OF RID:			ORIGINATOR/DATE:
DISCREPANCY: <div>THIS PART IS FILLED BEFORE 15.15 MARCH THE 10TH</div>			
SUGGESTED SOLUTION: <div>THIS PART IS FILLED BEFORE 15.15 MARCH THE 10TH</div>			
SCREENING PANEL DISPOSITION:			
ACCEPTED	REJECTED	SCREENING PANEL CHAIRPERSON SIGNATURE	
SUPPLIER'S RESPONSE:			

SUPPLIER'S RESPONSE <div> <div></div> <div>WEDNESDAY THE 10TH (AFTERNOON)</div> </div>				
<div> <div></div> </div>				SUPPLIER SIGNATURE <div></div>
REVIEW GROUP / PANEL DISPOSITION <div> <div></div> <div>WEDNESDAY THE 10TH (AFTERNOON)</div> </div>				
ACCEPTED <div></div>	REJECTED <div></div>	WITHDRAWN <div></div>	CLOSED <div></div>	REVIEW GROUP CHAIRMAN SIGNATURE <div></div>
BOARD DISPOSITION <div></div>				
<div></div>				BOARD CHAIRMAN SIGNATURE <div></div>
ACCEPTED <div></div>	REJECTED <div></div>	WITHDRAWN <div></div>	CLOSED <div></div>	REVIEW GROUP CHAIRMAN SIGNATURE <div></div>
DUE DATE FOR ACTION <div></div>	CLOSE OUT DATE <div></div>	CLOSE OUT REFERENCE <div></div>		PROJECT MANAGER SIGNATURE <div></div>

<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
SUPPLIER'S RESPONSE <input type="checkbox"/>					
<input type="checkbox"/>					SUPPLIER SIGNATURE <input type="checkbox"/>
REVIEW GROUP / PANEL DISPOSITION: <input type="checkbox"/>					
ACCEPTED <input type="checkbox"/>	REJECTED <input type="checkbox"/>	WITHDRAWN <input type="checkbox"/>	CLOSED <input type="checkbox"/>	REVIEW GROUP CHAIRMAN SIGNATURE <input type="checkbox"/>	
BOARD DISPOSITION <input type="checkbox"/>					
<div style="text-align: center; font-size: 2em; border: 1px solid black; padding: 10px;"> RIDS BOARD THURSDAY MORNING </div>					
<input type="checkbox"/>					BOARD CHAIRMAN SIGNATURE <input type="checkbox"/>
ACCEPTED <input type="checkbox"/>	REJECTED <input type="checkbox"/>	WITHDRAWN <input type="checkbox"/>	CLOSED <input type="checkbox"/>	REVIEW GROUP CHAIRMAN SIGNATURE <input type="checkbox"/>	
DUE DATE FOR ACTION <input type="checkbox"/>	CLOSE OUT DATE <input type="checkbox"/>	CLOSE OUT REFERENCE <input type="checkbox"/>		PROJECT MANAGER SIGNATURE <input type="checkbox"/>	

AGENDA (Tuesday, 9/3)

- TODAY
 - AMS-02 MECH. AND THERMAL WORKSHOP
 - To cover all the ‘last minute’ documents, reports, work-in-progress
 - To close some open issues on AMS-02 configuration / detailed design

AGENDA (Wednesday, 10/3)

- TOMORROW
 - AMS-02 THERMAL CDR
 - Presentations
 - RIDS collection until 15.15
 - RIDS discussion in 2 parallel sessions
 - Thermal
 - Mechanical

AGENDA (Thursday, 11/3)

- DAY-AFTER-TOMORROW
 - RIDS closure, Action Item List

AGENDA (Friday, 12/3)

- A few places still available for visiting Leonardo's "LAST SUPPER"
- REGISTER BEFORE 12.00 TODAY

THERMAL CDR - DINNER

– IN THE EVENING: TODAY OR
TOMORROW

- we meet at 18.45 at the tram stop, close to the Hotel:
how many are you?

LET'S START

9.30	Coffee, Tea	
10.00	Introduction, Welcome	J. Burger, M. Molina
10.15	ECAL Thermal status, HV bricks mechanical discussion	A.Franzoso/ F. Cadoux
10.45	CAB Thermal Discussion	CRISA-CGS
11.45	AMS-02 switch on sequence: heaters	M. Capell, C. Vettore
12.15	GPS	C. Zurbach
12.35	Lunch	
13.45	Star tracker	C. Gargiulo
14.15	Mass budget update	M. Molina
14.30	TTCS and Tracker radiator	NLR+NIKHEFF +OHB
15.00	LHP and TTCS pipes routing	R. Becker + OHB + NIKHEF
15.30	Coffee break	
16.00	Main radiators accomodation	M. Capell / A. Assenza / B. Hollenbach
16.30	Bonding	M. Capell
17.00	Conclusion	

PARALLEL SESSION		
15.30	AMS-02 Structural analysis:loads	B. Sommer
16.30	Preliminary analysis results	CGS + OHB
17.15	STA requirements and configuration	LMSO (T. Martin) + CGS (M. Molina)
17.45	Parallel session conclusion	

TUESDAY, 10/3

8.30	Coffee, Tea	
9.00	Thermal CDR introduction, rules	M. Molina
	Thermal control system status overview:	
9.15	Radiators	F. Bodendieck
9.30	Crates	M. Molina
9.50	Cryocoolers and zenith radiator	F. Bodendieck
10.10	cryocoolers requirements	GSFC + CGS + OHB
10.20	TTCS	NLR+ZSU+NIKHEF
11.00	TRD (incl. LAS and UTOF)	RWTH-OHB
11.20	Coffee Break	
11.30	VC +USS+ACC	C. Clark / SCL
11.45	TRD GAS BOX	C. Clark
12.00	TOF	M. Cova
12.15	RICH	M. Cova
12.30	LUNCH	
13.30	MLI configuration	C. Vettore
		R. Zambra / M. Olivier / B. Sommer
14.30	Conclusions from Structural Splinter meeting	
15.00	E-crate structural analysis	C. Moratto
15.15	RIDs collection	
	RIDs review on Thermal control, structures (2 parallel sessions)	
15.30		
17.15	Coffee Break	
17.30	RIDs summary	J. Burger

WEDNESDAY, 11/3

8.30	BOARD ONLY: RID disposition	J. Burger
9.30	Coffee, Tea	
10.00	OPEN RIDs summary	J. Burger
10.30	RIDs closure	J. Burger
11.30	Action Item List	M. Molina
12.00	AMS-02 Thermal system schedule	M. Molina
12.30	Plan for the Delta CDR	
13.00	lunch	
14.00	meeting end	